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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CIRIC, LJILJANA V

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 11/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/783,533

Applicant(s)

Burk et al.

Examiner

Ljiljana V. Ciric *AKC*

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 24, 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) 5-7, 11, 15, 18, and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-10, 12-14, 16, 17, and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Feb 15, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

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DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of the first species, readable on claims 1 through 4, 8 through 10, 12 through 14, 16, 17, and 19 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the variation of Figure 9 is a feature which was disclosed for use with either of the two different embodiments of Figures 1 through 4 and 5 through 8, respectively, and that allowable generic claims are present. This is not found persuasive because these arguments fail to point out specific reasons why applicant considers the examiner's requirement to restrict to be in error. Applicant, for example, does not state that the various species identified by the examiner are not patentably distinct.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 5 through 7, 11, 15, 18, and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 7. *JVC 10/12/02*

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

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Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the vehicle (or at least a part of the vehicle) as recited in claims 16, 17, and 19, for example, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The abstract of the disclosure is objected to because it is too long and because it contains minor grammatical informalities (i.e., "a" should be inserted immediately preceding "valve" in line 3 of the abstract). Correction is required. See MPEP § 608.01(b).

Claim Objections

6. Claims 3, 9, and 13 are objected to because of the following informalities: all numerals in the claims should be written out in full, i.e., "3 way" should be written out as "three-way" and "4 way" should be written out as "four way" for improved clarity and readability. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 1 through 4, 8 through 10, 12 through 14, 16, 17, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document.

For example, with regard to the preamble of claim 1 as written, it is not clear whether "which is designed" [claim 1, lines 1-2] refers to the motor vehicle or to the air conditioning system. If the latter, recommend replacing "which is designed" with "said air conditioning system" or "the air conditioning system", as appropriate.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation of "at least one

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other operating mode,” and the claim also recites the at least one operating mode being “in the form of at least one of a heat pump operating mode and a reheat operating mode” which is the narrower statement of the range/limitation. Claims 8, 12, 16, and 19 each contain the same set of limitations and are similarly rendered indefinite thereby.

With regard to claim 3 as written, it is not clear how the limitations “with a first connection” differs from “with a second connection *directly or indirectly*”, thereby rendering the claim indefinite with regard to the scope of protection sought. If it is necessary to specify that the second connection is direct or indirect, in the absence of similar qualifying language relating to the first connection, is the first connection direct or indirect or both? Claims 9 and 13 contain the same limitations and are similarly unclear as written.

Also with regard to claim 3 as written, the limitations “which is connected with a first connection with a fourth connection of the 4-way valve” is unclear as written, further rendering the claim indefinite. Again, claims 9 and 13 contain the same limitations and are similarly unclear as written.

With regard to claim 16 as written, it is not clear whether the limitation “the at least one other operating mode” appearing in lines 24-25 refers to the at least one other operating mode recited in line 3 of the claim or to one of the two at least one other operating modes listed in lines 4-5 of the claim, thus rendering the claim indefinite with regard to the scope of protection sought.

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Similarly, with regard to claim 19 as written, it is not clear whether the limitations “the at least one other operating mode” appearing in lines 22-23 of the claim and “said at least one other operating mode” appearing in line 24 refer to the at least one other operating mode recited in 3 of the claim or to one of the two at least one other operating modes listed in lines 4-5 of the claim, thus rendering the claim indefinite with regard to the scope of protection sought.

With regard to claim 18 as written, it is not clear what is meant by the limitation “whereby the drying mode is activated *at least after shutdown of the vehicle in a previous air conditioning or reheat mode*”, thereby rendering the claim indefinite.

Also with regard to claim 19 as written, it appears that the reheat operating mode is recited twice as being included by the at least one other operating mode, once in the alternative in the preamble of the claim and once in line 25 of the claim, but not in the alternative, thereby rendering the claim even more indefinite. Claims 2 and 17 are similarly unclear.

Finally, it is not clear to which of the previously recited operating modes the recitation of “this operating mode” in line 30 of claim 19 refers.

The above is an indicative, but not necessarily an exhaustive, list of 35 U.S.C. 112, second paragraph, problems. Applicant is therefore advised to carefully review all of the claims for additional problems. Correction is required of all of the 35 U.S.C. 112, second paragraph problems, whether or not these were particularly pointed out above.

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Claim Rejections - 35 U.S.C. § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

10. As best can be understood in view of the indefiniteness of the claims, claims 8, 10, 12, 14, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by *Ueda*.

Ueda discloses a vehicular air conditioner essentially as claimed, including a compressor 1, a refrigerant cooler 3, a supply air/refrigerant heat exchanger 4 disposed in a supply air channel 10, a coolant cycle including a refrigerant/coolant heat exchanger 15 and a supply air/coolant heat exchanger 17, various refrigerant flow control valves such as four-way valve 2, an accumulator 9, and check valves 7 and 8.

The reference thus reads on the claims.

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11. Alternately for claims 8, 10, 12, and 14, and as best can be understood in view of the indefiniteness of the claims, claims 1, 4, 8, 10, 12, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by *Tanaka et al.*

Tanaka et al. discloses a vehicular air conditioner essentially as claimed, including a compressor 122, a refrigerant cooler 112, a supply air/refrigerant heat exchanger 111 disposed in a supply air channel 100, a coolant cycle including a refrigerant/coolant heat exchanger 132 and a heat exchanger 136 which reads broadly on the internal combustion engine exhaust gas/coolant heat exchanger as claimed, a heat generating component 133, various refrigerant flow control valves such as four-way valve 123, an accumulator 250, and, check valves 129a, b, and e. See Figure 24, for example.

The reference thus reads on the claims.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

12. The non-application of art against claims 2, 3, 9, 13, and 17 should not be construed as an indication that the claims contain allowable subject matter but rather that the claims could not be examined on the merits due to indefiniteness.

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Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Itoh et al.*, *Hara*, *Iritani et al.*, *Inoue et al.*, *Suzuki et al.*, *Tajima et al.*, *Matsuda et al.*, and *Wlech* each discloses a vehicular air conditioner with plural operating modes and/or a refrigerant cycle. *Burk et al.* represents a vehicular air conditioner having at least one inventor in common with the instant invention.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric, whose telephone number is (703) 308-3925. While she works a flexible schedule that varies from day to day and from week to week, Examiner Ciric may generally be reached at the Office during the work week between the hours of 10 a.m. and 6 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett, can be reached on (703) 308-0101. The fax phone number is (703) 305-3463.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

lvc

October 18, 2002



**LJILJANA CIRIC
PATENT EXAMINER**

LJILJANA V. CIRIC